#### STATEMENT OF BASIS

## CITY OF PORT TOWNSEND NPDES PERMIT NO. WA0037052

The purpose of this Statement of Basis is to explain the need to modify the Permit to increase design capacity for the City of Port Townsend Wastewater Treatment Plant.

### I. GENERAL INFORMATION

A. <u>Permittee</u>: City of Port Townsend

540 Water Street

Port Townsend, Washington 98368

B. <u>Discharge Locations</u>: Strait of Juan de Fuca

Latitude: 48° 08' 30" N Longitude: 122° 47' 00" W

# II. REQUEST FOR MODIFICATION:

During 1999 and 2000, the City of Port Townsend completed a facility planning project. The outcome of this planning was the City of Port Townsend Wastewater Facilities Plan, Volume 1 of 2 of November 2000; and the City of Port Townsend Comprehensive Plan, Volume 2 of 2 of September 1999. These plans were submitted to the Department of Ecology (Ecology) on December 1, 2000, and approved by Ecology on March 2, 2001. These plans included a re-rating of the capacity of the Port Townsend Wastewater Treatment Facility. Based on the information included in the City of Port Townsend Wastewater Treatment Facility Capacity Re-Rating that was in Appendix I of the plan, and based on the additional information included in the May 12, 2000, letter from Gray & Osborne, Wastewater Treatment Plant Capacity Re-Rating, City of Port Townsend, Jefferson County, Washington, Ecology concurred with the re-rating in an August 21, 2000, letter to the City.

Since Ecology concurred with the re-rating and approved the facility plan, we committed to modify the National Pollutant Discharge Elimination System (NPDES) permit for the treatment plant to implement the changes to the design capacity. This permit modification is therefore being completed to reflect the new approved design criteria for the plant.

The changes in design capacity are listed in the below table and in Special Condition S4.A. of the modified permit.

Design Criteria	Old Capacity	New Re-Rated
		Capacity
Average Annual Flow	1.27 MGD	1.44 MGD
Average Flow for the Maximum	1.81 MGD	2.05 MGD
Month		
BOD <sub>5</sub> Loading for Maximum	2804 lbs/day	3754 lbs/day
Month		-

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Design Criteria	Old Capacity	New Re-Rated
		Capacity
TSS Loading for Maximum Month	3018 lbs/day	4568 lbs/day

These changes to the design criteria bring about changes to the effluent limitations in the permit. The BOD<sub>5</sub> and TSS technology-based mass limits were adjusted to match the new design criteria. The new limits were calculated as follows:

Monthly effluent mass loadings (lbs/day) for  $BOD_5$  and TSS = 2.05 MGD (maximum monthly design flow) x 30 mg/l (concentration limit) x 8.34 (conversion factor) = 513 lbs/day

Weekly average effluent mass loadings for  $BOD_5$  and  $TSS = 1.5 \times 513$  lbs/day (the monthly loading) = 769 lbs/day.

Mass limits are either calculated as above, or as 15% of the influent loading limit. The more restrictive method is used for the permit limit. A comparison of old and new limits is in the below table:

Parameter	Old Effluent	New Effluent
	Limitation	Limitation
BOD <sub>5</sub> Average Monthly	420 lbs/day	513 lbs/day
BOD <sub>5</sub> Average Weekly	630 lbs/day	769 lbs/day
TSS Average Monthly	453 lbs/day	513 lbs/day
TSS Average Weekly	679 lbs/day	769 lbs/day

Besides modifying the design criteria in the permit, Ecology noted a few other minor items that needed to be modified and were therefore also changed in the permit. In Special Condition S3.F. on reporting for shellfish protection, the phone numbers listed for Ecology and Health were outdated, and therefore, were revised for this permit modification. Also it was noted that Special Condition S6.D. and S10. contained the phrase (180 days prior to permit expiration). This should have been replaced with the actual date that is 180 days prior to permit expiration prior to the permit being issued. The date January 3, 2004, was inserted in both special conditions. Also, this date was added to the Summary of Permit Report Submittals on page 4 of the permit for all submittals due 180 days prior to permit expiration.

Since this permit is approaching its expiration date and no other significant changes need to be made to it besides the above described modifications, the permit may just be reauthorized for another five-year term rather than being rewritten. That means no changes would be made to the existing permit during the re-issuance process, which would likely be the case even if a more thorough rewriting was completed.

This Statement of Basis will serve as an amendment to the Fact Sheet and Permit.

#### **RESPONSE TO COMMENTS**

## CITY OF PORT TOWNSEND WASTEWATER TREATMENT PLANT NPDES PERMIT NO. WA0037052

### IMPLEMENTATION OF APPROVED RE-RATE PERMIT MODIFICATION

The following comment was received during the Public Notice of Permit Modifications held for NPDES Permit No. WA0037052. The public notice lasted from November 13, 2003, through December 13, 2003. A public hearing was not held.

Below is the comment received. The comment is followed by the corresponding response, permit change (or lack of change), and the Ecology justification of the change (or lack of change).

Comment by the City of Port Townsend

#### Comment:

It is clear in the documents that were approved by the Department of Ecology that the design population based on re-rating of the facility with an average annual flow of 1.44 MGD and using 120 gpdpc equates to a design population of 12,000 people. The City would like to request that the Design Population criteria be changed from 10,410 to be 12,000 as indicated in the approved documents.

## Response:

The 12,000 design population was in the approved documents and should have been changed along with the other design numbers in the permit. The oversight was corrected and the modification will be issued with the design population of 12,000.